

**METHODS AND APPARATUS FOR FORMING
CURVED AXIAL BORES THROUGH SPINAL VERTEBRAE**

ABSTRACT OF THE INVENTION

5 One or more curved axial bore is formed commencing from an anterior or posterior sacral target point and cephalad through vertebral bodies in general alignment with a visualized, trans-sacral axial instrumentation/fusion (TASIF) line in a minimally invasive, low trauma, manner. An anterior axial instrumentation/fusion line (AAIFL) or a posterior axial instrumentation/fusion line (PAIFL) that extends from the anterior or posterior target point, respectively, 10 in the cephalad direction following the spinal curvature through one or more vertebral body is visualized by radiographic or fluoroscopic equipment. Generally curved anterior or posterior TASIF axial bores are formed in axial or parallel or diverging alignment with the visualized AAIFL or PAIFL, respectively. 15 The anterior and posterior TASIF axial bore forming tools can be manipulated from proximal portions thereof to adjust the curvature of the anterior or posterior TASIF axial bores as they are formed in the cephalad direction. The boring angle of the distally disposed boring member or drill bit can be adjusted such that selected sections of the generally curved anterior or posterior TASIF axial bores can be made straight or relatively straight, and other sections thereof can 20 be made curved to optimally traverse vertebral bodies and intervening discs, if present.